

AMENDMENTS TO THE CLAIMS

Claims 1 through 5 have been previously cancelled.

Please amend Claim 6 as follows.

6. (Currently Amended) A method for locating a particular mobile station, wherein said particular mobile station is one of a plurality of mobile stations, and wireless signal measurements are capable of being obtained using wireless transmissions between each of the plurality mobile stations and a network of communication stations, each said communication station being for at least one of transmitting and receiving the wireless transmissions, comprising:

first providing access to at least some of a plurality of estimators for estimating locations of said mobile stations, wherein each of said at least some estimators provide a corresponding location estimate when supplied with a corresponding portion of said wireless signal measurements obtained from wireless transmissions between said mobile stations and said network of communication stations;

second providing access to a plurality of data item collections, wherein for each of a plurality of geographical locations, there is a corresponding one of said data item collections having (a1) and (a2) following:

- (a1) a representation of the geographical location, and
- (a2) data indicative of said wireless signal measurements between one of the mobile stations and the communication stations when said one mobile station is approximately at the geographical location of (a1);

for each of said at least some estimators and said data item collections, perform (b1) and (b2) following:

- (b1) inputting to the estimator said corresponding portion of said wireless signal measurements obtained from each of said data of (a2) for some of said data item collections for generating corresponding location estimates;
- (b2) comparing, for each data item collection (D) of at least some of said data

25 item collections providing input in (b1) above, (b2-1) and (b2-2)
following;
(b2-1) said representation (a1) of D, with
(b2-2) said corresponding location estimate resulting from the
inputting of D in (b1),
30 for determining one or more corresponding performance measurements of
the estimator;
activating one or more of said estimators with their said corresponding portions of
wireless signal measurements obtained using wireless transmissions between the particular
mobile station and said network of communication stations for ~~estimating~~ providing an estimate
35 of one or more locations of said particular mobile station;
obtaining a resulting location estimate for the particular mobile station using the
estimates of said one or more locations;
wherein one of said steps of activating and obtaining is dependent upon one or more of
said performance measurements.

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Please amend Claim 7 as follows.

7. (Currently Amended) The method as claimed in Claim 6, wherein said plurality of
estimators includes an estimator that outputs a location for at least one of the mobile stations that
is dependent upon one of: (a) satellite signals received by said at least one mobile station, (b) a
time of arrival measurement of a signal between said at least one mobile station and the network
5 of communication stations, (c) a time difference of arrival measurement of a signal between said
at least one mobile station and the network of communication stations, (d) a recognition of a
pattern in signals communicated between said at least one mobile station and the network of
communication stations, (e) a statistical prediction technique ~~dependent~~ whose output location is
dependent upon said plurality of data item collections, (f) an angle of arrival of signals
10 communicated between said at least one mobile station and the network of communication
stations.

8. (Previously Presented) The method as claimed in Claim 6, wherein said step of activating includes determining said one or more of said estimators using at least one of said corresponding performance measurements for said one or more estimators.

9. (Previously Presented) The method as claimed in Claim 6, wherein said step of obtaining includes deriving said resulting location estimate from a first location obtained from a first of said one or more estimators, and a second estimate obtained from a second of said one or more estimators.

10. (Previously Presented) The method as claimed in Claim 9, wherein said step of deriving includes determining a most likely location for the particular mobile station using said first and second locations and at least one value obtained from said corresponding performance measurements of said first and second estimators.

11. (Previously Presented) The method as claimed in Claim 6, further including a step of responding to Internet requests with at least said resulting location estimate.

12. (Previously Presented) The method as claimed in Claim 11, wherein said resulting location estimate locates a vehicle.

Please cancel Claim 13.

Please amend Claim 14 as follows.

14. (Currently Amended) The method as claimed in Claim 6, wherein for one of said at least some estimators, ~~said step of comparing includes~~ there is a further step of deriving one of said corresponding performance measurements as a value indicative of a likelihood that a location estimate by said one estimator for said particular mobile station identifies one of the

5 ~~unknown~~ locations.

Please amend Claim 15 as follows.

15. (Currently Amended) The method as claimed in Claim 6, further including a step of partitioning said plurality of (a2) portions of said data item collections into a plurality of partition areas, wherein ~~for~~ substantially every one of said (a2) portions of said data item collections in a first of said partition areas, ~~such said (a2) portions~~ satisfy an associated constraint
5 for said first partition area; and

for a first of said at least some estimators, ~~said step of (b2) of comparing includes~~ the steps (c1) and (c2) following are performed:

(c1) determining a first of said one or more corresponding performance measurements for said first estimator by using said corresponding location estimates from (b1)
10 wherein said some of said data item collections include those of said first partition area; and

(c2) associating said first performance measurement with said associated constraint, so that if said wireless signal measurements between said particular mobile station and the communication stations satisfy said associated constraint, then said first
15 performance measurement is indicative of a likelihood that a first location obtained from said first estimator in said step of activating identifies a location of the particular mobile station.

Please amend Claim 16 as follows.

16. (Currently Amended) The method of Claim 15, wherein said wireless signal measurements between the particular mobile station and the communication stations satisfy said associated constraint when one or more of (a) and (b) following occur:

(a) said wireless signal measurements between the particular mobile station and the
5 communication stations substantially identify a predetermined set of one or more communication

station identifiers that identify communication stations that detect the particular mobile station,
and

10 (b) said wireless signal measurements between the particular mobile station and the
communication stations substantially identify a predetermined set of one or more communication
station identifiers that identify communication stations that are detected by the particular mobile
station.

Please cancel Claim 17.

Please amend Claim 18 as follows.

18. (Currently Amended) A method as claimed in Claim 95 [[17]], wherein
(a) each said particular condition includes a geographical location of a mobile station;
and
(b) each said corresponding set of data for ~~evaluating~~ identifying the particular
5 condition includes wireless signal measurements between the mobile station and a
network of communication stations.

Please amend Claim 19 as follows.

19. (Currently Amended) The method as claimed in Claim 95 [[17]], wherein said
step of ~~activating~~ accessing includes:
transmitting, on the Internet, a request to said first evaluator for ~~evaluating~~ identifying the
particular condition;
5 transmitting, on the Internet, a request to a second of the evaluators for identifying the
particular condition; and
wherein the resulting identification is obtained using an identification from each of the
first and second evaluators.

Please amend Claim 20 as follows.

20. (Currently Amended) A method for evaluating a particular condition of a plurality of conditions, wherein for substantially every one of said conditions there is a corresponding set of data for evaluating the condition, comprising:

accessing a classifier for classifying the particular condition into one or more classes of a plurality of classes for said plurality of conditions, wherein said classifier uses said
5 corresponding set of data for the conditions for classifying the conditions;

selecting between two or more of evaluators for evaluating the particular condition, wherein communication with at least one of said two or more evaluators includes a transmission using the Internet;

10 wherein said step of selecting includes a substep of determining, for each of said evaluators, an indication as to whether information is available in said corresponding set of data for the particular condition for evaluating the particular condition by said evaluator;

activating one or more of said evaluators, selected in said selecting step, for obtaining evaluations of the particular condition, wherein a first of said one or more evaluators receives a
15 portion of said corresponding set of data for the particular condition via the Internet;

first obtaining one or more evaluator related preference data items for identifying a preference[[s]] among said evaluations, wherein said preference data items are for said one or more classes in which the particular condition is classified;

20 second obtaining resulting evaluation information for the particular condition using at least one of said evaluations of the particular condition and at least one of said preference data items; and

transmitting said resulting evaluation information on the Internet to a predetermined destination.

21. (Previously Presented) The method of Claim 20, wherein
for each of at least some of said classes, assignment of one or more said conditions to

said class is dependent upon a predetermined method of determining a similarity in said corresponding set of data for said conditions assigned to the class; and

5 wherein said step of first obtaining said resulting evaluation information includes determining a most likely evaluation using a plurality of said evaluations of the particular condition and a corresponding performance measurement for each of said plurality of evaluations.

Please amend Claim 22 as follows.

22. (Currently Amended) The method of Claim 20, wherein said step of ~~second~~ first obtaining said one or more evaluator related preference ~~performance~~ data items includes:

 obtaining, for at least a ~~first~~ one of said one or more evaluators, a corresponding one of said related preference ~~performance~~ data items by comparing: (1) evaluations[[,]] obtained ~~for~~
5 from said ~~first~~ one evaluator[[,]] for other of the conditions in at least one of the classes having the particular condition with (2) known correct ~~evaluations~~ identifications of the other conditions[[,]];

 wherein said corresponding one related ~~preference performance~~ data item [[is]] includes a value indicative of a likelihood that one of said evaluations, by the one evaluator, of the
10 particular condition ~~are~~ is a correct evaluation[[s]].

23. (Previously Presented) The method as claimed in Claim 20, wherein said plurality of conditions is one of:

- (a) economic market related conditions, wherein said evaluators provide forecasts of future economic conditions;
- 5 (b) malfunctions in electronic systems, wherein said evaluators provide diagnoses of the malfunctions;
- (c) text in documents for scanning, wherein said evaluators provide evaluations for identifying the scanned text;
- (d) vehicle malfunctions, wherein said evaluators provide diagnoses of the vehicle

- 10 malfunctions;
- (e) computer malfunctions, wherein said evaluators provide diagnoses of the computer malfunctions;
 - (f) communication network malfunctions, wherein said evaluators provide diagnosis of the network malfunctions;
 - 15 (g) medical conditions, wherein said evaluators provide diagnoses of the medical conditions; and
 - (h) weather data, wherein said evaluators provide predictions of future weather conditions.

24. (Previously Presented) The method as claimed in Claim 20, wherein said classes are hierarchically ordered.

25. (Previously Presented) The method as claimed in Claim 20, wherein said resulting evaluation information includes a diagnosis of said particular condition.

Please amend Claim 26 as follows.

26. (Currently Amended) The method as claimed in Claim 20, wherein said resulting evaluation information and at least one of said evaluations includes an estimate for said particular condition.

Please amend Claim 27 as follows.

27. (Currently Amended) A method for determining, from a plurality of conditions, ~~a particular~~ a condition (CNDN) desired to be identified, wherein for substantially every one of said conditions there is a corresponding set of data for identifying the condition, comprising:

~~obtaining~~ determining a plurality of classes for said plurality of conditions, wherein for

5 each said class (C), at least most of said conditions therein are each identified by predetermined

criteria, said predetermined criteria for identifying said corresponding set of data for the conditions in the class C;

providing access to ~~determining~~ a plurality of estimators for ~~determining~~ ~~estimating~~ said conditions when said estimators are supplied with said corresponding sets of data for said
10 conditions;

obtaining ~~storing~~ a plurality of data item collections, wherein for each of said estimators and each of more than one of said conditions, there is one of said data item collections having:

- (a1) a representation of the condition, and
- (a2) a representation of a data set for identifying said condition of (a1);
- 15 (a3) an estimate of said condition generated by said estimator when said representation of (a2) is input to said estimator;

activating a first of said estimators with said corresponding set of data for said ~~particular~~ condition CNDN for determining a first estimate ~~[[of]]~~ for identifying said ~~particular~~ condition CNDN;

20 selecting ~~retrieving~~ one or more of said data item collections, wherein for each of said ~~selected~~ ~~retrieved~~ data item collections, said estimate of (a3): (i) was generated by said first estimator, and (ii) has a determined relationship to said first estimate that is determined to be satisfied for selecting ~~used in retrieving~~ said one or more data item collections;

determining a second estimate of said ~~particular unknown~~ condition CNDN using said
25 representations of (a1) from said retrieved data items.

28. (Previously Presented) The method as claimed in Claim 27, wherein

(a) each said condition includes a geographical location of a wireless mobile station;
and

(b) each said data set includes wireless signal measurements between the mobile
5 station and a network of communication stations.

Please amend Claim 29 as follows.

29. (Currently Amended) An apparatus for locating mobile ~~stations~~ units, wherein wireless signal measurements are capable of being obtained using wireless transmissions between: (i) each of the mobile ~~stations~~ units, and (ii) a plurality ~~network~~ of terrestrial communication stations, each said communication station being for at least one of transmitting and receiving the wireless transmissions with the mobile units, comprising:

a[[n]] predetermined interface for accessing a plurality of estimators, each of the estimators for estimating locations of a plurality of said mobile ~~stations~~ units, when said estimators are supplied with a corresponding input, wherein for at least a first and a second of said estimators, (a) the first estimator uses a ~~their~~ corresponding input[[s]] that includes data obtained from a different one of: (a) satellite signals S received by one of the mobile ~~stations~~ units being located by the first estimator, wherein the signals S are received from a transmitting station that is not supported on the earth's surface, and (b) the second estimator uses a second corresponding input for one of the mobile units being located by the second estimator, the second corresponding input includes data obtained from one of (b-1) and (b-2) following for determining a location estimate: (b-1) a time difference of arrival measurement of a signal between one of the mobile ~~units~~ stations and the ~~network~~ of communication stations, and (b-2) a multipath recognition of a pattern in signals communicated between one of the mobile ~~units~~ stations and the ~~network~~ of communication stations[[,]];

~~an interface for receiving measurements of wireless signals transmitted between said mobile stations and the communication stations, said interface for receiving including;~~

wherein a controller for requesting the predetermined interface outputs to the first estimator, at a first destination, first information for locating at least some of the mobile units, and outputs to the second estimator, at a second destination, second information for locating at least some of the mobile units;

wherein at least one of: (c1) the first information is transmitted to the first destination via a transmission on a telecommunications network such that the first and second destinations are distributed thereon, and (c2) the second information is transmitted to the second destination via a transmission on a telecommunications network such that the first and second destinations are distributed thereon;

one or more components for receiving location requests for the plurality of mobile units, and initiating contacts via the predetermined interface with one or more of the plurality of estimators for estimating mobile unit locations to satisfy the requests ~~activation of at least one of said first and second estimators for estimating a location of one or more of the mobile stations, wherein, depending on whether said corresponding input is available for said first estimator, when said first estimator receives an activation request for locating a first of said mobile stations, a first location estimate is provided, and wherein, depending on whether said corresponding input is available for said second estimator, when said second estimator receives an activation request for locating the first mobile station, a corresponding location estimate is provided;~~
~~an output interface for outputting, mobile station location information obtained using one or more location estimates obtained from said estimators receiving activation requests by said controller.~~

Please amend Claim 30 as follows.

30. (Currently Amended) The apparatus of Claim 29, further including an archive having a plurality of data item collections, wherein for each of a plurality of geographical locations, there is a corresponding one of said data item collections having (a1) and (a2) following:

- 5 (a1) a representation of the geographical location, and
 (a2) data indicative of said wireless signal measurements between one of the mobile ~~units~~ stations and the communication stations when said one mobile ~~unit~~ station is approximately at the geographical location of (a1);
 and
- 10 further including a comparator for comparing[:]: for each estimator, E, of at least some of said estimators, (b1) and (b2) following:
- (b1) ~~corresponding~~ location estimates, each obtained from inputting to the estimator E ~~said a corresponding input from an instance portion of said wireless signal measurements obtained from each of said data of (a2) for~~

- 15 ~~some of said data item collections; and~~
(b2) the corresponding geographical location representations of (a1) for those
of the data item collections also having instances of said data of (a2) from
which one of the corresponding inputs is used ~~each of at least some of said~~
~~data item collections~~ for obtaining the corresponding location estimates in
20 (b1), ~~said representation (a1);~~

wherein a result from said comparator is used for determining ~~one or more~~ at least one
corresponding performance measurement[[s of]] for each of the estimators E.

Please amend Claim 31 as follows.

31. (Currently Amended) The apparatus of Claim 29, further including an output
interface for outputting mobile unit location information obtained using one or more location
estimates obtained from said estimators receiving activation requests from the predetermined
interface, wherein said output interface includes an access to the Internet for transmitting said
5 location information, via the Internet, to an Internet accessible destination for which a previous
request for said location information was received by said apparatus.

Please amend Claim 32 as follows.

32. (Currently Amended) A method for locating a ~~particular~~ mobile station unit
(MU), wherein said ~~particular~~ mobile station unit MU is one of a plurality of mobile ~~stations~~
5 units, and wherein corresponding wireless signal measurements are capable of being obtained
using wireless transmissions between each of the plurality of mobile stations units and a ~~network~~
plurality of terrestrial communication stations, each said communication station being for at least
one of transmitting and receiving the wireless transmissions with the mobile units, comprising:
first transmitting, via a network, a first activation request for receipt by a first
10 predetermined destination of the network for activating a first location estimating method
~~estimator from a plurality of estimators~~ for estimating a location of the ~~particular~~ mobile station

~~unit MU, when information is available in said corresponding set of measurements of the particular mobile station for estimating a location of the particular mobile station by the first estimator;~~

15 second transmitting, via a network, a second activation request for receipt by a second predetermined destination, wherein the second activation request is for ~~wherein locations of the particular mobile station are independent of a location of the first estimator;~~ activating a second location estimating method, estimator from said plurality of estimators for estimating a same or different location of the particular mobile station unit MU, when information is available in said
20 ~~corresponding set of measurements of the particular mobile station for estimating a location of the particular mobile station by the second estimator;~~

wherein the first and second predetermined destinations are different from the mobile unit MU;

wherein, for ~~determining~~ providing a location estimate, each of said first and second
25 location estimating methods ~~estimators~~ uses data obtained from a different one of (a) and (b) following:

(a) ~~satellite signals S received by the particular mobile station unit MU, the signals S received from a transmitting station that is not supported on the earth's surface,~~
and

30 (b) at least one of (i) and (ii) following:

(i) a time difference of arrival measurement of [[a]] signals between the particular mobile station unit MU and at least two of the network of communication stations, wherein at least one of the two communication stations receives a wireless signal from the mobile unit MU, or

35 (ii) ~~(c)~~ wireless signals (WS) communicated between the communication stations and one or more of the mobile units different from MU;

wherein when an instance of the data is obtained, at least in part, from the time difference of arrival measurement for determining a location of the mobile unit MU, there is a two-way communication between the mobile unit MU and at least one of the communication stations in
40 order to provide the instance of the data to a corresponding one of first and second location

estimating methods;

45 wherein when an instance of the data is obtained, at least in part, from an instance of the wireless signals WS, a corresponding one of first and second location estimating methods uses location dependent characteristics of the wireless signals WS to determine a correspondence between: (1) characteristics of the wireless signals transmitted between the mobile unit MU, and one or more of the communication stations, and (2) a geographical location of the mobile unit MU;

50 wherein when activated for locating MU, each of the first and second location estimating methods performs at least one corresponding geographical location determining computation for locating MU, wherein the corresponding computations are performed at network sites distributed from one another.

55 ~~a multipath pattern signals communicated between the particular mobile station and the network of communication stations;~~
~~outputting location information that provides a location of the particular mobile station;~~
~~said location information obtained using one or more location estimates provided by said at least one of said first and second estimators.~~

Please amend Claim 33 as follows.

33. (Currently Amended) A method for locating a ~~particular~~ mobile unit MU ~~station~~, wherein said ~~particular~~ mobile unit MU ~~station~~ is one of a plurality of mobile units ~~stations~~, and corresponding wireless signal measurements are capable of being obtained using wireless transmissions between each of the plurality mobile units ~~stations~~ and a ~~network~~ plurality of communication stations residing on a surface of the earth, each said communication station being for at least one of transmitting and receiving the wireless transmissions with the mobile units, comprising:

10 selecting between at least two or more location estimating methods ~~estimators~~ for estimating a location of the ~~particular~~ mobile unit MU ~~station~~, wherein each of ~~said two or more~~ first and second of the location estimating methods ~~estimators~~ is dependent upon ~~particular~~

corresponding data provided by at least one of (a) through (d) following:

- (a) ~~satellite~~ signals received by the ~~particular~~ mobile unit MU station from a transmitting station not supported on the earth's surface,
- (b) a time difference of arrival measurement of ~~a~~ wireless signals between the ~~particular~~ mobile unit MU station and the ~~network~~ of communication stations,
- (c) an angle of arrival measurement of a signal between the ~~particular~~ mobile unit MU station and at least one of the network of communication stations, and
- (d) ~~a multipath pattern in~~ wireless signals (WS) transmitted between the communication stations and one or more of the mobile units different from MU communicated
between the particular mobile station and the network of communication stations;

wherein said step of selecting includes a substep of determining, for at least one of said location estimating methods ~~estimators~~, an indication as to whether information is available ~~in~~ said corresponding set of measurements for the particular mobile station for estimating a location of the particular mobile unit MU station by said estimator;

requesting activation of activating one or more of said first and second location estimating methods ~~estimators~~, selected in said selecting step, for estimating one or more locations of said ~~particular~~ mobile unit MU station;

wherein a preference is given to locating the mobile unit MU by one of the location estimating methods: (i) that uses data obtained from available wireless signals received by the mobile unit MU from a transmitting station not supported on the earth's surface, over (ii) locating the mobile unit MU by one of the location estimating methods that is more dependent upon the corresponding data available for locating the mobile unit MU from (b) through (d) hereinabove;

wherein when the corresponding data for a selected location estimating method (LEM) of the first and second location estimating methods is provided, at least in part, by an instance of (c) hereinabove, there is a two-way communication between the mobile unit MU and at least one of the communication stations in order to provide the corresponding data to the location estimating method LEM;

wherein when the corresponding data for a selected location estimating method (LSM_{ws})

40 of the first and second location estimating methods includes an instance of the wireless signals WS, the selected location estimating method LSM_{WS} uses location dependent characteristics of the wireless signals WS to determine a correspondence between: (1) characteristics of the wireless signals transmitted between the mobile unit MU, and one or more of the communication stations, and (2) a geographical location of the mobile unit MU

45 ~~outputting location information that provides a location of the particular mobile station, said location information obtained using one or more location estimates provided by said one or more estimators activated in said step of activating.~~

Please amend Claim 34 as follows.

34. (Currently Amended) A method for locating ~~a particular~~ mobile units MU_1 and MU_2 station, wherein said ~~particular~~ mobile units MU_1 and MU_2 ~~station is~~ are each from one of a plurality of mobile units ~~stations~~, and wireless signal measurements are capable of being obtained using wireless transmissions between each of the plurality of mobile units, ~~stations~~ and

5 a ~~network~~ plurality of communication stations supported on the surface of the earth, each said communication station being for at least ~~one of~~ transmitting some of and receiving the wireless transmissions to the mobile units for determining geographic locations of the mobile units, comprising:

transmitting, to a first destination, a first request for activating a first location estimator

10 ~~selecting between two or more estimators for determining a first location estimate estimating a location of the particular mobile unit MU_1 station, wherein for determining the first location estimate, the first location estimator uses each of said two or more estimators is dependent upon particular first data obtained using from [[one of: (a)]] satellite signals received by the particular mobile unit MU_1 station from a transmitting station not supported on the earth's surface[.,,];~~

15 ~~(b) a time of arrival measurement of a signal between the particular mobile station and the network of communication stations;~~

~~(c) a time difference of arrival measurement of a signal between the particular mobile station and the network of communication stations;~~

~~(d) an angle of arrival measurement of a signal between the particular mobile station and the network of communication stations;~~

~~(e) a multipath pattern in signals communicated between the particular mobile station and the network of communication stations;~~

providing a second request for activating of a second location estimator, to a second destination, for determining a second location estimate of the mobile unit MU₂ using second data obtained from location indicative data from one or more signals communicated between the mobile unit MU₂ and one of the communication stations, wherein there is a two-way communication between the mobile unit MU₂ and at least one of the communication stations in order to provide the second data to the second location estimator, the second data providing information indicative of a position of MU₂ relative to at least one of the communication stations;

wherein the first and second destinations are distributed from one another on a telecommunications network, wherein at least one of the first and second location estimates is transmitted on the telecommunications network to a predetermined site on the telecommunications network as a response to a corresponding one of the first and second requests; and

wherein for locating at least one mobile unit (MU_n) of the plurality of mobile units, a preference is given for: (i) determining a location of the mobile unit MU_n using data (D) obtained from wireless signals received by the mobile unit MU_n from a transmitting station not supported on the earth's surface, over (ii) determining a location of the mobile unit MU_n using, instead of the data D, alternative available location indicative data obtained from one or more signals communicated between the mobile unit MU_n and one of the communication stations, wherein there is a two-way communication between the mobile unit MU_n and at least one of the communication stations in order to obtain the alternative location data, wherein the alternative location data provides information indicative of a position of MU_n relative to at least one of the communication stations

~~wherein said step of selecting includes a substep of determining, for at least one of said estimators, an indication as to whether information is available in said corresponding set of~~

~~measurements for the particular mobile station for estimating the particular mobile station by said estimator;~~

50 ~~activating one or more of said estimators, selected in said selecting step, for estimating one or more locations of said particular mobile station;~~

~~outputting location information that provides a location of the particular mobile station, said location information obtained using one or more location estimates provided by said one or more estimators activated in said step of activating.~~

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Please amend Claim 35 as follows.

35. (Currently Amended) A method for locating a particular mobile station units, wherein ~~said particular mobile station is one of a plurality of mobile stations~~, and wireless signal measurements are capable of being obtained using wireless transmissions between each of the plurality mobile units stations and a network plurality of communication stations supported on the surface of the earth, each said communication station being for at least one of transmitting and receiving the wireless transmissions with the mobile units for determining geographic locations of the mobile units, comprising:

selecting between ~~two or more estimators~~ first and second location estimating methods, or location estimates therefrom, for estimating a location of ~~the particular one of the mobile units (MU₁) station~~, wherein for obtaining a location estimate of the mobile unit MU₁, each of said two or more estimators first location estimating method is dependent upon corresponding particular data obtained using one of: (a) satellite signals received by the particular mobile unit MU₁ station from a transmitting station not supported on the earth's surface, and said second location estimating method is dependent upon corresponding data obtained using (b) wireless signals (WS) communicated between the communication stations and one or more of the mobile units different from MU₁ a multipath pattern in signals communicated between the particular mobile station and the network of communication stations;

wherein said step of selecting includes a substep of determining, for at least one each of said ~~estimators~~ first and second location estimating methods, an indication as to ~~whether an~~

~~availability of an acceptable resulting location estimate information is available in said corresponding set of measurements for the particular mobile station for estimating the particular mobile unit MU₁ station by said estimator;~~

~~activating one or more of said estimators, selected in said selecting step, for estimating one or more locations of said particular mobile station;~~

~~outputting location information that provides a location of the particular mobile station; said location information obtained using one or more location estimates provided by said one or more estimators activated in said step of activating.~~

Claim 36 has been previously cancelled.

Claim 37 has been previously cancelled.

Please amend Claim 38 as follows.

38. (Currently Amended) The method of Claim 34, further including ~~a step of repeating:~~

- (a) ~~said a step of activating for activating one or more of said selected location estimators~~ estimators for obtaining one or more additional location estimates of a location of one of said particular mobile units MU₁ and MU₂ station, and
- (b) ~~said a step of outputting for outputting for one or more additional instances of said location information based, at least in part, on at least one of the additional location estimates;~~

wherein said step of ~~repeating~~ activating is for obtaining a more accurate location estimate of the ~~particular one mobile unit station~~.

Please amend Claim 39 as follows.

39. (Currently Amended) The method of Claim 38, further including a step of ~~determining using~~ a frequency of performing said step of outputting for providing one or more

~~additional~~ instances of said location information to a location information receiving application.

Please amend Claim 40 as follows.

40. (Currently Amended) The method of Claim 39, wherein said location information receiving application uses the location information for a predetermined service ~~is for one of: an emergency response, surveillance of a person, locating a vehicle, locating an animal, and informing a person of his/her location.~~

Please amend Claim 41 as follows.

41. (Currently Amended) The method of Claim 39, wherein said location information receiving application is for determining whether there is a predetermined distance between the one particular mobile unit station and another one of the mobile ~~stations~~ units.

42. (New) The method of Claim 20, wherein the activating step includes activating the first evaluator, and a second of said evaluators for determining, respectively, a first and a second evaluation of said particular condition; and

further including the steps of:

5 determining, for said first evaluation, a first of preference measurement from the preference data items, wherein the first preference measurement is indicative of a performance of the first evaluator in at least one of the classes which the particular condition is classified;

determining, for said second evaluation, a second of preference measurement from the preference data items, wherein the second preference measurement is indicative of a performance of
10 the second evaluator in at least one of the classes which the particular condition is classified;

wherein the preference P is determined using the first and second preference measurements;
and

wherein the step of second obtaining includes obtaining the resulting evaluation for the particular condition using the preference P to give a preference to one of said first and second

15 evaluations.

43. (New) The method of Claim 42, wherein the particular condition relates to a geographic location of a user station that is interactive on a network.

44. (New) The method of Claim 20, wherein the selecting step includes selecting the at least one evaluator wherein communication with the at least one evaluator includes the transmission via the Internet.

45. (New) The apparatus of Claim 29, wherein said predetermined interface for accessing includes a routing component for providing information that is used in routing at least one instance of each of the first and second requests via a transmission on the Internet.

46. (New) The apparatus of Claim 29, wherein the transmitting station not supported on the earth's surface includes a satellite.

47. (New) The apparatus of Claim 29, wherein for at least one mobile unit (U_1) of the mobile units, the corresponding input for the first estimator includes data obtained from signals received by U_1 from a transmitting station (TS) not supported on the earth's surface, wherein the first estimator determines a location of U_1 that is dependent upon a signal time delay of the
5 signals from TS to U_1 , and

wherein for at least one mobile unit (U_2) of the mobile units, the corresponding input for the second estimator includes a time difference of arrival measurement of signals between U_2 , and at least two terrestrial communication stations of the communication stations.

48. (New) The apparatus of Claim 47, wherein at least one of the two terrestrial communication stations receives a wireless signal from U_2 substantially at a time that U_2 is being located.

49. (New) The apparatus of Claim 29, wherein for at least one mobile unit (U_1) of the mobile units, the corresponding input for the first estimator includes data obtained from signals received by U_1 from a transmitting station (TS) not supported on the earth's surface, wherein the first estimator determines a location of U_1 that is dependent upon a signal time delay of the signals from TS to U_1 , and

wherein for at least one mobile unit (U_2) of the mobile units, the corresponding input for the second estimator includes data obtained from signals communicated between the mobile unit U_2 and the communication stations, wherein the second estimator has been trained or calibrated using values obtained from transmissions of wireless signals from a plurality of locations of one or more of the mobile units to associate: (1) wireless signal characteristics obtained from the signals communicated between the mobile unit U_2 and the communication stations with (2) a geographical location used for locating the mobile unit U_2 .

50. (New) The apparatus of Claim 29, wherein for at least one mobile unit (U_1) of the mobile units, the corresponding input for the first estimator includes data obtained from the time difference of arrival measurement of signals between U_1 , and at least two terrestrial communication stations of the communication stations, and

wherein for at least one mobile unit (U_2) of the mobile units, the corresponding input for the second estimator includes data obtained from signals communicated between the mobile unit U_2 and the communication stations, wherein the second estimator has been trained or calibrated using values obtained from transmissions of wireless signals from a plurality of locations of one or more of the mobile units to associate: (1) wireless signal characteristics obtained from the signals communicated between the mobile unit U_2 and the communication stations with (2) a geographical location used for locating the mobile unit U_2 .

51. (New) The apparatus of Claim 29, wherein, the initiated contacts with the first estimator depends on whether said corresponding input is available for said first estimator.

52. (New) The apparatus of Claim 51, wherein, the initiated contacts with the second

estimator depends on whether said corresponding input is available for said second estimator.

53. (New) The apparatus of Claim 29, wherein for at least one of the mobile units (U_1), the one or more components directs the predetermined interface to provide a first activation request to the first estimator, wherein the first estimator locates U_1 using data obtained from an instance of the signals S transmitted from an instance of the transmitting station TS to U_1 ,
5 wherein the first estimator determines a location of U_1 using a signal time delay of the instance of the signals S ;

wherein for at least one location of one of the mobile units (U_2), the one or more components directs the predetermined interface to provide a second activation request to the second estimator, wherein the second estimator locates U_2 using data obtained from an instance
10 of the time difference of arrival measurement of signals between U_2 and at least two terrestrial communication station of the communication stations; and

wherein for at least one location of one of the mobile units (U_3), the one or more components directs the predetermined interface to provide a third activation request to a third of the estimators, wherein the third estimator locates U_3 using data obtained from an instance of
15 wireless signals communicated between U_3 and the communication stations, wherein for estimating the location of U_3 , the third estimator has been trained or calibrated, using values obtained from wireless transmissions of wireless signals from a plurality of locations of the mobile units, to associate: (1) wireless signal characteristics obtained from the instance of the wireless signals communicated between U_3 and the communication stations with (2) a
20 geographical location for the mobile unit U_3 .

54. (New) The apparatus of Claim 53, wherein each of the mobile units U_1 , U_2 , and U_3 is different from the other two of the mobile units U_1 , U_2 , and U_3 .

55. (New) The apparatus of Claim 53, wherein each of the mobile units U_1 , U_2 , and U_3 is at a substantially different location when located.

56. (New) The apparatus of Claim 53, wherein at least two of the mobile units U_1 , U_2 , and U_3 are the same mobile unit.

57. (New) The apparatus of Claim 29, wherein for estimating a location of at least one mobile unit (U_1) of the mobile units, one of the first and second estimators has been trained or calibrated using values obtained from wireless signals for prior locations of one or more different ones of the mobile units to associate or correlate: (1) wireless signal characteristics
5 obtained from wireless signals transmitted between the mobile unit U_1 and at least one of the communication stations, with (2) a geographical location for the mobile unit U_1 .

58. (New) The method of Claim 29, wherein in order to locate one of the mobile units, an instance of the second corresponding input includes data obtained from a time difference of arrival measurement of signals between the one mobile unit being located, and at least two terrestrial communication stations of the communication stations;
5 wherein there is a two-way communication between the mobile unit MU and at least one of the communication stations for obtaining the instance of the corresponding input of (b).

59. (New) The method of Claim 58, wherein each of the first and second destinations corresponds to a server site of a same telecommunications network.

60. (New) The method of Claim 32, wherein the network by which said first estimating method is activated is the Internet, and the network by which said second estimating method is activated is the Internet.

61. (New) The method of Claim 32, wherein at least one of the first and second location estimating methods provide a location estimate of the mobile unit MU according to (b)(ii).

62. (New) The method of Claim 32, wherein a location estimate for the mobile unit

MU from the first location estimating method is independent of a location estimate for the mobile unit MU from the second location estimating method, and a location estimate for the mobile unit MU from the second location estimating method is independent of a location
5 estimate for the mobile unit MU from the first location estimating method.

63. (New) The method of Claim 32, wherein one or more of: the first transmitting step, and the second transmitting step includes transmitting on the Internet.

64. (New) The method of Claim 32, wherein at least one of the first and second location estimating methods provides a location estimate of the mobile unit MU according to (a), and the transmitting station is a satellite.

65. (New) The method of Claim 32, further including a step of outputting location information for the mobile unit MU, wherein the location information includes a representation of a first location of the mobile unit MU, at a first time, obtained using a location estimate from the first location estimating method, and the location information includes a representation of a
5 second location of the mobile unit MU, at a second time, obtained using a location estimate from the second location estimating method, wherein the first and second locations are different.

66. (New) The method of Claim 32, further including receiving a location estimate from the first location estimating method when information is available from corresponding wireless signal measurements for estimating a location of the mobile unit MU by the first location estimating method; and

5 receiving a location estimate from the second location estimating method when information is available from corresponding wireless signal measurements for estimating a location of the mobile unit MU by the second location estimating method.

67. (New) The method of Claim 32, further including, for a mobile unit (U_1) of the mobile units, a step of receiving a location estimate substantially dependent upon signals S_1

received by the mobile unit U_1 , the signals S_1 received from a transmitting station that is not supported on the earth's surface; and

- 5 for a mobile unit (U_2) of the mobile units, a step of receiving a second location estimate substantially dependent upon a time difference of arrival measurement of signals between the mobile unit U_2 and the communication stations, wherein at least one of the communication stations receives a wireless signal S_2 from the mobile unit U_2 , and S_2 is used to provide input to a corresponding one of first and second location estimating methods for determining the second
- 10 location estimate; and
- wherein U_1 and U_2 are different.

68. (New) The method of Claim 67, further including, for a mobile unit (U_3) of the mobile units, a step of receiving a location estimate (LE), wherein the location estimate LE is determined using values of a wireless transmissions, T , from a plurality of locations of the plurality of mobile units different from the mobile unit U_3 ;

- 5 wherein a step is performed of one of adaptively associating or statistically correlating the values of the wireless transmissions T with data from wireless signals communicated between the mobile unit U_3 and the communication stations.

69. (New) The method of Claim 32, wherein for determining the location of the mobile unit MU, and for each of the first and second location estimating methods, at least one geographical location determining computation using data from wireless signals communicated between the mobile unit MU and the communication stations is performed at a location remote
- 5 from the location of the mobile unit MU.

70. (New) The method of Claim 32, wherein each of the first and second predetermined destinations are server sites on a same telecommunications network.

71. (New) The method of Claim 32, wherein for each mobile unit (U_k) of a plurality mobile units different from the mobile unit MU, at least one value obtained from a wireless

transmission between the different mobile unit U_k to the communication stations is used for associating, or statistically correlating: (1) data from wireless signals communicated between the
5 mobile unit MU and the communication stations, and (2) a geographical location of MU.

72. (New) The method of Claim 32, further including a step of receiving one or more location estimates for locating the mobile unit MU, the location estimates obtained from one or more of the first and second location estimating methods; and

transmitting location information determined from the one or more location estimates to a
5 predetermined destination as a response to a location request for locating the mobile unit MU.

73. (New) The method of Claim 33, wherein for one of the first and second location estimating methods, the corresponding data includes data provided by (a), and

wherein for the other of the first and second location estimating methods, the
corresponding data therefor includes a collection of the wireless signals WS, wherein this other
5 location estimating method has been trained or calibrated using location dependent characteristics of the collection of wireless signals WS to associate: (1) characteristics of the wireless signals transmitted from the mobile unit MU to at least one of the communication stations, with (2) a geographical location for locating the mobile unit MU.

74. (New) The method of Claim 33, wherein for one of the first and second location estimating methods, the corresponding data includes data provided by (b); and

wherein for the other of the first and second location estimating methods, the
corresponding data therefor includes a collection of the wireless signals WS, wherein this other
5 location estimating method has been trained or calibrated using location dependent characteristics of the collection of wireless signals WS to associate: (1) characteristics of the wireless signals transmitted from the mobile unit MU to at least one of the communication stations, with (2) a geographical location for locating the mobile unit MU.

75. (New) The method of Claim 33, wherein requests for activating the first location

estimating method for locating at least some of the mobile units includes contacting a predetermined first destination, and requests for activating the second location estimating method for locating at least some of the mobile units includes contacting a predetermined second
5 destination, and the predetermined first and second destinations are different from the mobile unit MU.

76. (New) The method of Claim 75, wherein the predetermined first and second destinations are different from one another.

77. (New) The method of Claim 33, wherein for at least one mobile unit (U_1) of the mobile units, a location estimating method (E) of the two or more location estimating methods is used to locate U_1 , wherein the estimator E uses satellite signals received by the mobile unit U_1 .

78. (New) The method of Claim 33, wherein for at least one mobile unit (U_1) of the mobile units, a location estimating method (E) of the two or more location estimating methods is used to locate U_1 , wherein the location estimating method E uses a time difference of arrival measurement of a signal between the mobile unit U_1 and the communication stations, wherein
5 there is a two-way communication between the mobile unit U_1 and at least one of the communication stations in order to provide input to the location estimating method E.

79. (New) The method of Claim 33, wherein for at least one mobile unit (U_1) of the mobile units, a location estimating method (E) of the two or more location estimating methods is used to locate U_1 , wherein the location estimating method E uses an angle of arrival measurement of a signal between the mobile unit U_1 and at least one of the communication
5 stations.

80. (New) The method of Claim 33, wherein for at least one mobile unit (U_1) of the mobile units, a location estimating method (E) of the two or more location estimating methods is used to locate U_1 , wherein the location estimating method E is dependent upon information

5 obtained from a collection of the wireless signals received at the communication stations from one or more of the mobile units different from U_1 , wherein the information from the collection is input to the location estimating method E for training or calibrating E to identify a corresponding geographical location for U_1 from characteristics of wireless signals communicated between U_1 and one or more of the communication stations.

81. (New) The method of Claim 33, wherein at least one of the first and second location estimating methods is substantially dependent upon an instance of the corresponding data provided by a particular one of (a) through (d), and the other of the first and second location estimating methods is not substantially dependent on the particular one;

5 wherein the requesting activation step includes a step of providing to a first destination a first request for activating the first estimator, and for providing to a second destination a second request for activating the second estimator, wherein at least the first request is provided to the first destination via a transmission on a communications network such that the first and second destinations correspond to distinct server sites on the communications network,

82. (New) The method of Claim 33, wherein the transmitting station is a satellite.

83. (New) The method of Claim 33, further including outputting, to a destination, location information that provides at least one location of the mobile unit MU, the location information obtained using one or more location estimates provided by said one or more of the first and second of said location estimating methods;

5 wherein the destination uses the location information, and the step of outputting includes a transmission on a communications network.

84. (New) The method of Claim 34, wherein at least one of first and second requests is received by an Internet server site corresponding to one of the first and second destinations.

85. (New) The method of Claim 34, wherein the telecommunications network

includes server sites for the first and second destinations.

86. (New) The method of Claim 34, wherein the location indicative data from the one or more signals communicated between the mobile unit MU_2 and one of the communication stations includes at least one of:

- 5 (a) a time of arrival measurement of a signal communicated between the mobile unit MU_2 and one of the communication stations, wherein there is a two-way communication between the mobile unit MU_2 and at least one of the communication stations in order to provide the second data to the second location estimator;
- 10 (b) a time difference of arrival measurement of a signal between the mobile unit MU_2 and the communication stations, wherein there is a two-way communication between the mobile unit MU_2 and at least one of the communication stations in order to provide the second data to the second location estimator;
- (c) data for identifying a direction of arrival measurement of a signal between the mobile unit MU_2 and one of the communication stations; and
- 15 (d) wireless signals (WS_2) communicated between the communication stations and one or more of the mobile units different from MU_2 , wherein the second location estimator uses location dependent characteristics of the wireless signals WS_2 to determine a correspondence between: (1) characteristics of the wireless signals transmitted between the mobile unit MU_2 , and one or more of the communication stations, and (2) a geographical location of the mobile unit MU_2 .

87. (New) The method of Claim 86, wherein the second location estimator requires data obtained from the wireless signals WS_2 .

88. (New) The method of Claim 87, wherein to obtain a geographical location for MU_2 from the second location estimator, values obtained from the wireless signals WS_2 are associated with, or statistically correlated with, data from wireless signals communicated between the mobile unit MU_2 and the communication stations.

89. (New) The method of Claim 86, wherein the second location estimator requires data obtained from the data for identifying a direction of arrival measurement.

90. (New) The method of Claim 34, further including, for at least one of the mobile units **MU₁** and **MU₂**, a step of selecting the corresponding first or second location estimator, wherein the step of selecting is dependent upon an availability of the corresponding first and second data.

91. (New) The method of Claim 34, further including obtaining a location estimate of the mobile unit **MU₁** from the first location estimator via the telecommunications network; and transmitting to a network address, location information that provides a location of the mobile unit **MU₁**, the location information obtained using the first location estimate, and the
5 network address used for providing the location information to a predetermined application that uses the location information for performing a predetermined service.

92. (New) The method of Claim 35, wherein when the corresponding data for a selected one of the first and second location estimating methods, or location estimate therefrom, is obtained using an instance of the wireless signals **WS**.

93. (New) The method of Claim 92, wherein the selected location estimating method, or location estimate therefrom, is dependent upon characteristics of the wireless signals **WS** to determine a correspondence between: (1) characteristics of the wireless signals transmitted between the mobile unit **MU₁**, and one or more of the communication stations, and (2) a
5 geographical location of the mobile unit **MU₁**.

94. (New) The method of Claim 35, further including a step of requesting activation of at least said first location estimating method for estimating one or more locations of said mobile unit **MU₁**, wherein the corresponding data for said first location estimating method is

obtained from the signals received by the mobile unit **MU₁** from a satellite.

95. (New) The method of Claim 35, further including first requesting activation of at least one of the first and second location estimating methods for obtaining a first location estimate of **MU₁**, wherein the activation request is transmitted to a first destination, via a transmission on a communications network.

96. (New) The method of Claim 95, further including a step of providing to a second destination, a request for activation of the other of the first and second location estimating methods different from the at least one location estimating method, the request for activation of the other location estimating method for obtaining a second location estimate of a second of the mobile units **MU₂**.

97. (New) The method of Claim 96, wherein the other location estimating method is activated for estimating one or more locations of the second mobile unit **MU₂**, wherein the activation of the other location estimating method is dependent upon wireless signals (**WS₂**) communicated between the communication stations and one or more of the mobile units different from **MU₂**.

98. (New) The method of Claim 35, wherein the first and second location estimating methods are, respectively, accessed via first and second destinations that are distributed from one another on a communications network;

wherein for at least one of a first request for activating the first location estimating method, and a second request for activating the second location method, at least one resulting location estimate therefrom is transmitted on the communications network to a predetermined site on the communications network as a response to a corresponding one of the first and second requests.

99. (New) The method of Claim 35, wherein for locating the mobile unit **MU₁**, there

are one or more mobile units (MU_k) of the mobile units different from MU_1 , wherein at each of one or more locations of each of the mobile units MU_k , one or more values of one or more wireless transmissions between the mobile unit MU_k and the communication stations are used in training, or stochastically correlating, the second location estimating method to associate: (i) each of a plurality of geographic locations, and (ii) for each of the geographic locations, GL, corresponding values of wireless communications between the communication stations and the geographic location GL.

100. (New) A method for determining, from a plurality of conditions, first and second conditions, comprising:

providing access to a plurality of evaluators for identifying said conditions, wherein each of said evaluators determine condition identifications when supplied with an available corresponding set of data for one or more of said conditions to be identified, and wherein for at least a first of said evaluators access is provided via the Internet;

evaluating a performance of first and second of the evaluators so that a first indication of a likely effectiveness is associated with condition identifications from the first evaluator, and a second indication of a likely effectiveness is associated with conditions identifications from the second evaluator;

first selecting between the first and second evaluators for identifying the first condition, and contacting the first evaluator, via the Internet, for identifying the first condition;

first obtaining from the first evaluator, a first condition identification via the Internet;

first determining, using the first condition identification, first resulting information for identifying the first condition;

wherein the step of first determining includes accessing the first indication of a likely effectiveness when generating the first resulting information;

second selecting between the first and second evaluators for identifying the second condition, and contacting the second evaluator for identifying the second condition, the second evaluator contacted at a site different from a site contacted in said step of contacting the first evaluator;

second obtaining, from the second evaluator, a second condition identification;
second determining, using the second condition identification, second resulting
information for identifying the second condition;

25 wherein the step of second determining includes accessing the second indication of a
likely effectiveness when generating the second resulting information.

101. (New) The method as claimed in Claim 100, wherein said plurality of conditions
is one of:

- (a) economic market related conditions, wherein said evaluators provide forecasts of
future economic conditions;
- 5 (b) malfunctions in electronic systems, wherein said evaluators provide diagnoses of
the malfunctions;
- (c) text in documents for scanning, wherein said evaluators provide evaluations for
identifying the scanned text;
- (d) vehicle malfunctions, wherein said evaluators provide diagnoses of the vehicle
10 malfunctions;
- (e) computer malfunctions, wherein said evaluators provide diagnoses of the
computer malfunctions;
- (f) communication network malfunctions, wherein said evaluators provide diagnosis
of the network malfunctions;
- 15 (g) medical conditions, wherein said evaluators provide diagnoses of the medical
conditions; and
- (h) weather data, wherein said evaluators provide predictions of future weather
conditions.

102. (New) The apparatus of Claim 29, wherein for one of the mobile units (M_1)
wherein a location estimate (LE_1) is obtained from the first estimator, there is no corresponding
location estimate for the mobile units M_1 from the second estimator for substantially a same time
and location of M_1 that LE_1 is obtained.

103. (New) The apparatus of Claim 29, wherein for one of the mobile units (M_1) wherein a location estimate (LE_1) is obtained from the first estimator, there is a location estimate (LE_2) for M_1 from the second estimator for substantially a same time and location of M_1 that LE_1 is obtained, and each of LE_1 and LE_2 is determined substantially independently of the other of
5 LE_1 and LE_2 .

104. (New) The apparatus of Claim 30, wherein for determining a location estimate of a particular one of the mobile units, at least one of the corresponding performance measurements are used for determining a probability of the location estimate correctly identifying an actual location of the particular mobile unit.